

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

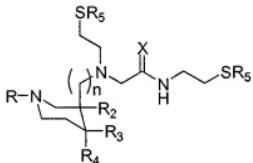
Listing of Claims:

1 – 162. (canceled)

163. (currently amended) A method of imaging dopamine transporters in brain tissue of a mammal, comprising the step of administering to a mammal a sufficient amount of a complex of claim 165 [[159]].

164. (canceled)

165. (new) A complex comprising technetium-99m and a compound represented by A:



wherein

X represents O or (H)₂;

R represents H, alkyl, alkoxy, alkylamino, aryl, heteroaryl, aralkyl, heteroaralkyl, acyl, alkoxycarbonyl, or alkylaminocarbonyl;

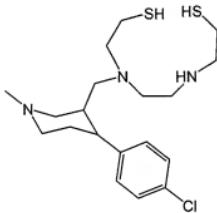
R₂ represents H;

R₃ represents optionally substituted aryl or heteroaryl;

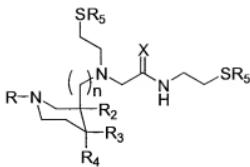
R₄ represents H;

R_5 represents independently for each occurrence H, alkyl, alkoxy, alkylamino, aryl, heteroaryl, aralkyl, heteroaralkyl, acyl, alkoxy carbonyl, or alkylamino carbonyl; and
n is 0, 1, or 2.

166. (new) The complex of claim 165, wherein X is $(H)_2$.
167. (new) The complex of claim 165, wherein R is alkyl.
168. (new) The complex of claim 165, wherein R_3 is substituted phenyl.
169. (new) The complex of claim 165, wherein each R_5 is H.
170. (new) The complex of claim 165, wherein n is 1.
171. (new) The complex of claim 165, wherein the compound is represented by the following structure:



172. (new) A complex comprising rhenium and a compound represented by A:



A

wherein

X represents O or (H)₂;

R represents H, alkyl, alkoxy, alkylamino, aryl, heteroaryl, aralkyl, heteroaralkyl, acyl, alkoxycarbonyl, or alkylaminocarbonyl;

R₂ represents H;

R₃ represents optionally substituted aryl or heteroaryl;

R₄ represents H;

R₅ represents independently for each occurrence H, alkyl, alkoxy, alkylamino, aryl, heteroaryl, aralkyl, heteroaralkyl, acyl, alkoxycarbonyl, or alkylaminocarbonyl ; and

n is 0, 1, or 2.

173. (new) The complex of claim 172, wherein the compound is represented by the following structure:

